



## Research Article

# Initial assessment and management of adults with suspected acute respiratory infection: a rapid evidence synthesis of reviews and cost-effectiveness studies

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## Plain language summary

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Acute respiratory infections, such as cold and flu, are common and can be caused by viruses or bacteria. People with symptoms of acute respiratory infection often go to their general practitioner, who may advise them to stay at home (with or without antibiotics or antivirals) or might refer them to hospital if the infection is serious. Doctors assess the patient's symptoms or may use a tool called an 'early warning score' to judge whether the infection is serious.

A systematic review is a research method where all relevant studies assessing a specific question are found and summarised. We aimed to summarise all systematic reviews and cost-effectiveness studies that assessed signs, symptoms and 'early warning scores' in adults with suspected acute respiratory infections in the community (i.e. not hospitalised patients). We found nine systematic reviews and one cost-effectiveness study. Several different early warning scores for acute respiratory infection have been assessed in systematic reviews. Seven of the reviews assessed early warning scores in patients with community-acquired pneumonia. Good-quality reviews concluded that further research is needed to see how useful the 'CRB-65' and 'Pneumonia Severity Index' early warning scores are for assessing pneumonia severity in the community. Another good-quality review concluded that the 'National Early Warning Score' early warning score appears to be useful in an emergency department setting. A good-quality review found that individual symptoms are not very reliable for diagnosing pharyngitis caused by streptococcal bacteria in patients with sore throat; the review also found that the 'Centor score' can help doctors decide whether to prescribe antibiotics for pharyngitis.

The cost-effectiveness study assessed clinical scores and rapid antigen detection tests (which test for substances that increase in our blood when we have certain infections) in patients with sore throat, and found that clinical scores may be cost-effective compared to delaying prescribing antibiotics.